WHAT IS CLAIMED IS:

1. A process for the preparation of 1-benzyl-4-[(5,6-dimethoxy-1-indanon)-2-yl] methylpiperidine hydrochloride (Donepezil HCl) of the Formula I

Formula I

comprising hydrogenating 5,6-dimethoxy-2-(pyridin-4-yl) methylene indan-1-one with a noble metal catalyst or a non-oxide derivative of a noble metal catalyst in a solvent at 20-100°C and 10-90 psi gauge pressure to form 4-[(5,6-dimethoxy-1-indanon)-2-yl] methyl piperidine of the Formula II

Formula II

which is alkylated with an alkylating agent in an organic solvent at 20-80°C.

- 2. The process according to Claim 1, wherein the solvent is selected from the group consisting of C₁-C₄ aliphatic alcohol, organic acid, dilute HCl, ethyl acetate, aliphatic ketone, and mixtures thereof.
 - 3. The process according to Claim 2, wherein the solvent is acetic acid.
- 4. The process according to Claim 1, wherein the noble metal catalyst is selected from the group consisting of palladium, rhodium, and ruthenium.
- 5. The process according to Claim 4, wherein the noble metal catalyst is palladium.
- 6. The process according to Claim 5, wherein the palladium is at 10% concentration.

- 7. The process according to Claim 1, wherein the non-oxide derivative of a noble metal catalyst is a chloride or a sulphate of a noble metal selected from the group consisting of palladium, rhodium, and ruthenium.
- 8. The process according to Claim 1, wherein the noble metal catalyst or the non-oxide derivative of a noble metal catalyst is supported on a carrier.
- 9. The process according to Claim 8, wherein the carrier is selected from the group consisting of carbon, calcium carbonate, barium sulphate, and alumina.
 - 10. The process according to Claim 9, wherein the carrier is carbon.
- 11. The process according to Claim 1, wherein the hydrogenation is carried out at 70-80°C.
- 12. The process according to Claim 11, wherein the hydrogenation is carried out at about 75°C.
- 13. The process according to Claim 1, wherein the hydrogenation is carried out at 45-55 psi gauge.
- 14. The process according to Claim 13, wherein the hydrogenation is carried out at about 50 psi gauge.
- 15. The process according the Claim 1, wherein the alkylation is carried out with benzyl bromide.
- 16. The process according to Claim 1, wherein the alkylation is carried out in methylene dichloride and triethylamine mixture.